

Appln. No. 09/596,287

Attorney Docket No. 10543-014

II. Remarks

In response to the Office Action mailed January 20, 2004, kindly enter the foregoing amendment and consider the following remarks. Pursuant to 37 CFR §1.112, Applicant requests reconsideration of each and every ground of rejection set forth in the Office Action.

The Office Action and the references cited therein have been carefully considered. In this Amendment, claim 12 has been amended. Thus claims 1-7, 9-12, 14-16, 19-22 and 24-29 are pending and are at issue herein. In view of these amendments and the following remarks, favorable reconsideration of this application is requested.

STATUS OF CLAIMS 11 AND 15

On page 6 of the Office Action, the Examiner indicated that according to the amendment filed on June 16, 2003, claims 11 and 15 were cancelled.

The Applicant respectfully submits that claims 11 and 15 are currently pending and have not been cancelled. In particular, the amendment of June, 2003 includes a listing of claims which specifically list claims 11 and 15. Further, the second paragraph of the remark section does not identify either claim 11 or 15 as being cancelled.

However, the Applicant does note a typographical error in the summary of claims pending and at issue. In particular, claim 15 was not specifically identified as pending and at issue, however, claim 15 was referred to above as having been amended.

The Applicant apologizes for any confusion due to the summary of pending claims in the Remarks section, but respectfully request that claims 11 and 15 be given proper consideration.

ALLOWABLE SUBJECT MATTER

The Applicant would like to thank the Examiner for maintaining the acknowledgment of patentable subject matter. Specifically, the Examiner noted on page 5 of the Office Action that claims 1-7, 9, 10 and 22 are in condition for allowance,

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and Claims 20, 21, 28 and 29 are allowable if rewritten in independent form.

CLAIM REJECTIONS UNDER 35 USC §103

Claims 12 and 14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hiwatashi (U.S. Pat. No. 6,094,614) in view of Matsuno (U.S. Pat. No. 6,163,747). Claims 14, 16, 19 and 25-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Hiwatashi and Matsuno references as applied above, and further in view of Breed (U.S. Pat. No. 6,370,475). The Hiwatashi reference has been relied on for disclosure of a vehicle control system and a road coefficient estimating means. The Examiner notes that Hiwatashi does not disclose receiving a weather signal, but the Examiner relies on Matsuno for disclosing utilization of a weather signal. The Examiner notes that neither the Hiwatashi reference nor the Matsuno reference discloses that the position signal is received from one or more global positioning satellites, but relies on the Breed reference for disclosure of the same.

Claim 12, as amended, includes a database of various roads having data on road surface type, and a controller determining the road surface type associated with the vehicle position as well as a road surface condition based on the road surface type and the proximate weather condition. The controller produces a control signal indicative of the road surface type and the road surface condition.

The Hiwatashi reference does not disclose a database of various roads including data on road surface type. The Matsuno reference does not disclose a database of various roads, including data on road surface type. Thus, even assuming the propriety of the combination of Hiwatashi and Matsuno, all elements of claim 12 have not been met.

The Hiwatashi reference does not disclose a controller determining the road surface type associated with the vehicle positioning, and then further determining a road surface condition based on the road surface type and the proximate weather condition. The Matsuno reference does not disclose a controller determining the road surface type associated with the vehicle position and further determining a road surface condition based on the road surface type and the proximate weather

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condition. Accordingly, even assuming for argument sake the propriety of the combination of the Hiwatashi and Matsuno references, the combination does not teach all elements of claim 12.

The Hiwatashi reference does not disclose a controller producing a control signal indicative of the road surface type and the road surface condition. The Matsuno reference does not disclose a control signal indicative of the road surface type and the road surface condition. Thus, even assuming the propriety of the combination of the Hiwatashi and Matsuno references, the combination does not teach all elements of claim 12.

The further combination of the Breed reference will now be discussed. The Examiner correctly notes that Breed discloses a vehicle using a global positioning system and having a map database. The Breed reference is concerned with preventing vehicular accidents by monitoring the position of the vehicle on the road, but is not concerned with controlling the vehicle dynamics or altering a vehicle dynamic system to accommodate such information. Accordingly, there is no motivation or suggestion to combine the Breed reference with either the Hiwatashi or Matsuno references.

Even assuming the propriety of the proposed combination, the Breed reference simply does not disclose that the database includes information on road surface type. The Breed reference refers to information pertinent to preventing accidents, such as speed limits, presence of guard rails, width of each lane, width of the highway, width of the shoulder and similar boundaries. The Breed reference does not specifically refer to or even suggest having information on road surface type.

Again, even assuming the Breed reference did disclose a database having information on road surface type, Breed in no way teaches or suggests determining a road surface condition based on both the road surface type and the proximate weather condition. In fact, Breed specifically states at column 42, lines 13-20 that the use of road sensors or local meteorological stations having information on weather conditions allows a road surface condition to be classified based solely on the weather signal or conditions. Similarly, the Hiwatashi reference discloses using

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an air temperature sensor to estimate a road friction coefficient. Likewise, the Matsuno reference discloses an air temperature sensor or a rain fall sensor to detect the weather condition and estimate a road surface coefficient of friction.

In sum, none of the cited references discloses providing a database having information on road surface type and using a position signal to determine the road surface type associated with the vehicle position. Even assuming, for argument's sake, that the Breed reference or some other unknown reference discloses providing a database on road surface type, none of the references teaches or suggests that a road surface condition can be determined based on both the road surface type and the proximate weather condition.

For these reasons and all the reasons given above, the Applicant respectfully submits that independent claim 12 is not taught or suggested by the prior art, and respectfully request the withdrawal of the rejection of claim 12 and its dependent claims 14 and 24.

Independent claim 16 stands rejected over the combination of the Hiwatashi, Matsuno and Breed references. The combination proposed by the Examiner is for the most part identical to the combination proposed for claims 12 and 14.

Accordingly, the Applicant reiterates the remarks given above, because none of the three references teach or suggest the invention. Claim 16 recites the steps of providing a database of various road including data on road surface type, determining the road surface type corresponding to the vehicle position, and inputting a weather signal indicative of a proximate weather condition. Further, claim 16 recites the step of determining a road surface condition based on the road surface type and the proximate weather condition, and generating a control signal based on the road surface condition.

As discussed above, none of the references provide a database having data on road surface type. Even assuming, for argument's sake, that one of the references did disclose such data, none of the references teach or suggest determining a road surface condition based on both the road surface type and the proximate weather condition. To the contrary, all the references disclose utilizing

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data on the outside weather condition (i.e. via air sensors or rain sensors) which is used to determine a road surface coefficient of friction. These systems are typical of the prior art discussed in the background section of the present invention. None of the references indicate there are any problems or limitations on determination of road surface coefficient of friction. In sum, not only is there a lack of disclosure or a specific teaching, but there is also a lack of any motivation to combine or modify even assuming such a disclosure or teaching existed.

For these reasons and all the reasons given above, Applicant respectfully requests reconsideration and withdrawal of the rejection of Independent claim 16, as well as its dependent claims 19 and 25-27.

CONCLUSION

In view of the preceding amendments and remarks, Applicant respectfully submits that the specification is in order and that all of the claims are now in condition for allowance. If the Examiner believes that personal contact would be advantageous to the disposition of this case, the Applicant respectfully requests that the Examiner contact the Attorney of the Applicants at the earliest convenience of the Examiner.

Applicant has calculated no fees to be presently due in connection with the filing of this Paper. However, Applicant has authorized charging of any fee deficiency to the deposit account of Applicant's assignee, Visteon Global Technologies, Inc., as indicated in the Transmittal accompanying this Statement.

Respectfully submitted,

3/22/04

Date

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